

VISUAL IMPACT ASSESSMENT
LOST HILLS ROAD INTERCHANGE

July 21, 2011

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**City of Calabasas
and
Caltrans District 07**

This Visual Impact Assessment has been prepared by or under the direction of the following Licensed Landscape Architect. The Licensed Landscape Architect attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based.



David H. Tatsumi, RLA
CA #2033
Project Landscape Architect

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I. PURPOSE OF STUDY

The purpose of this study is to assess the visual impacts of the proposed Lost Hills Road Interchange Project (Project) and to propose measures to mitigate any adverse visual impacts associated with the construction of the Project on the surrounding visual environment. Furthermore, this study will outline the potential impacts to the existing landscape and visual context of the area along with any mitigation measures proposed to alleviate those impacts.

II. PROJECT DESCRIPTION

The City of Calabasas proposes to replace the existing Lost Hills Road/U.S. Highway 101 (US-101) overcrossing and modify the interchange (proposed project). The interchange is currently inadequate due to closely spaced intersections and the relatively high traffic flows. The proposed improvements would increase roadway widths to accommodate proper lane arrangements on the overcrossing; modify the existing northbound and southbound ramps; and replace the existing overcrossing with a new one designed with increased vertical clearance and higher seismic safety standards. Without the proposed project, traffic conditions would continue to worsen with time.

Existing vegetation within the project area includes mature Sycamore and White Alder trees along Lost Hills Road on the north side of the interchange. The balance of the existing landscape consists of a Coastal Sage Scrub plant community with native grasses (*Bromus carinatus* – California Brome and *Vulpia microstachys* – Small Fescue) and wildflowers (*Lupinus* spp. – Lupine) and a non-native, noxious weed (*Sinapis arvensis* – Charlock Mustard) on the hills.

The City has expressed their desire for the new Lost Hills Road Interchange landscape design to reflect the landscape designs at two existing interchanges: the US-101 at Kanan Road and the US-101 at Reyes Adobe Road. The Kanan Road and Reyes Adobe Road interchanges designs include an assortment of Coast Live Oaks, Western Redbuds, Toyon and Mexican Sage. These plants are planted informally around rock blankets that create the illusion of dry streams. The planting design theme shall be approved by the District Landscape Architect.

A. Build Alternatives

Alternative 1: No-Build Alternative



Figure 1: No Build Alternative

Alternative 1 is the “No Build” alternative that would maintain the existing condition.

Existing deficiencies include traffic delays and heavy traffic back-ups along the overcrossing, especially during the peak afternoon hours in both the northbound and southbound lanes. The left turn from northbound Lost Hills Road onto the US-101 northbound on-ramp creates a long queue of vehicles on Lost Hills Road waiting to enter the freeway and causes traffic delays along the overcrossing. The existing overcrossing also does not provide standard vertical clearance over the freeway.

This “No Build” alternative does not include any construction; and therefore would not create any new views. Under Alternative 1, there would be no loss or replacement of landscaping or other visual resources that would generate any visual impact changes.

This alternative also assumes that no improvements would be made to the existing Project beyond those already planned.

In this alternative, several Mandatory Design standards are not met:

- Index 309.2: Standard Vertical Clearance is 16.5 ft, and existing Vertical Clearance is 15.5 ft.
- Index 302: Shoulder Standard is 2 ft. However, existing conditions have the current 3-lane merge at bridge and results in no shoulders at the bridge.
- Index 501.3: The Standard spacing between freeway interchanges is 1 mile. The existing spacing between Lost Hills Road and Las Virgenes Road to the east is 0.82 miles and Liberty Canyon Road to the west is 0.87 miles.
- Index 504.3: The Standard separation of ramps and intersections is 400 ft. The existing minimum distance between the northbound ramps and Canwood Street to the north is 80 ft, between the southbound ramps and Canwood Street to the north is 385 ft, and between the southbound ramps to Agoura Road is 380 ft.

Additionally, several Advisory Design standards are not met:

- Index 101.1: The Standard design speed is 45 mph and existing conditions provide for a design speed of approximately 38 mph.

- Index 504.3: The Standard advisory separation of ramps and intersections is 500 ft. The existing minimum distance between the northbound ramps and Canwood Street to the north is 80 ft, between the southbound ramps and Canwood Street to the north is 385 ft, and between the southbound ramps to Agoura Road is 380 ft.

Alternative 2: Transportation System Management Alternative



Figure 2: Transportation System Management

Alternative 2 proposes transportation system management by synchronizing traffic signals at the ramp intersections and the intersection at Agoura Road. The goal of this alternative would be to lessen the congestion and to improve the efficiency of traffic signal timing.

Traffic signals equipped with fully automated video detection would improve the efficiency of traffic signal timing. While motorist and pedestrian safety at the intersection would be improved, based on the existing and forecast increase in usage, this alternative would result in minimal traffic flow improvement to the

Lost Hills Road Interchange at best.

As with any other vertical element, traffic signal lights are not visually pleasant, despite the safety advantages, they are considered to be unattractive to local residents who live close by. At a typical intersection equipped with traffic lights, there are at least four poles that may contain cameras, lit street signage, and other equipment. The vertical poles, flashing traffic lights and other attached equipment create a negative visual impact on the streets to pedestrians and local residents. The tall upright traffic lights would create repetitive shadow patterns on the Project site. The size and location of the shadows will vary throughout the day and throughout the year depending on the position of the sun.

Additionally, when large vehicles are stopped at the intersection for a red light, they block street pedestrians from viewing the landscapes.

This Alternative assumes that minimal improvement would be made within the Project. No additional signal lights would be added; however, there could be the addition of some small hardware on the existing signals for video detection upgrades. These hardware additions would not effectively change the visual impact of the project.

In this alternative, several Mandatory Design standards are not met:

- Index 309.2: Standard Vertical Clearance is 16.5 ft, and existing Vertical Clearance is 15.5ft.

- Index 302: Shoulder Standard is 2 ft. However, existing conditions have the current 3-lane merge at bridge and results in no shoulders at the bridge.
- Index 501.3: The Standard spacing between freeway interchanges is 1 mile. The existing spacing between Lost Hills Road and Las Virgenes Road to the east is 0.82 miles and Liberty Canyon Road to the west is 0.87 miles.
- Index 504.3: The Standard separation of ramps and intersections is 400 ft. The existing minimum distance between the northbound ramps and Canwood Street to the north is 80 ft, between the southbound ramps and Canwood Street to the north is 385 ft, and between the southbound ramps to Agoura Road is 380 ft.

Additionally, several Advisory Design standards are not met:

- Index 101.1: The Standard design speed is 45 mph and existing conditions provide for a design speed of approximately 38 mph.
- Index 504.3: The Standard advisory separation of ramps and intersections is 500 ft. The existing minimum distance between the northbound ramps and Canwood Street to the north is 80 ft, between the southbound ramps and Canwood Street to the north is 385 ft, and between the southbound ramps to Agoura Road is 380 ft.

Alternative 3: Roundabout Alternative



Figure 3: Roundabout

Alternative 3 features roundabouts: a four-legged circular roundabout on the north side and a four-legged “tear drop” roundabout on the south side of the Lost Hills Road overcrossing.

The overcrossing would extend an additional 30 feet, going from approximately 32 feet to approximately 62 feet in width, and its height would rise from approximately 15 feet high to approximately 20 feet high. The widened bridge would obstruct more views of the natural landscape for pedestrians, local residents and drivers and therefore is

considered as a negative visual impact. This alternative would require minimal overcrossing widening and minor improvements to the streets while it improves safety and circulation.

Roundabouts could create a negative visual impact with the slowed circular traffic pattern and the additional directional signage.

Alternative 3’s roundabout design would be slightly visible from the freeway. During non-prime commuting times, the Project interchange may be passed with the least amount of

awareness by the motorist traveling at the posted highway speed. However, during the peak hours, daily commuters would be exposed to the corridor for extended amounts of time and would have more of an opportunity to focus their attention on the highway elements.

The circular design of a roundabout would be more visible than the existing configuration due to the amount of area required for the road junctions. The uniqueness of the traffic circle would increase the built characteristic of the view.

In this alternative, several Mandatory Design standards are not met:

- Index 201.1: Stopping Site Distance for all elements of interchanges and intersections at grade shall follow Table 201.1 and is 360 ft. for a standard design speed of 45 mph for Lost Hills Road. The design speed of Lost Hills Road for this alternative is 37 mph. The Stopping Site Distance for a design speed of 37 mph is 274 ft.
- Index 202.2: Standard superelevation rates shall be based on Table 202.2 for a given range of radii. Standard superelevation rates for Lost Hills Road are 0.03 to 0.04. Figure 202.2 was used to confirm that the crowned section as proposed meets the criteria for the maximum comfortable speed for the design radii.
- Index 501.3: The Standard spacing between freeway interchanges is 1 mile. The existing spacing between Lost Hills Road and Las Virgenes Road to the east is 0.82 miles and Liberty Canyon Road to the west is 0.87 miles.
- Index 504.3: The Standard separation of ramps and intersections is 400 ft. The existing separation between the southbound ramps to Agoura Road is 330 ft.

Additionally, several Advisory Design standards are not met:

- Index 101.1: Design speed should be 45 mph but the Roundabout design speed is 37 mph;
- Index 204.4: Vertical curves for this design speed should have a minimum length of 374' but this alternative provides a curve with a length of 361'.
- Index 204.8: The normal minimum width of traffic openings and required falsework spans for various lane and shoulder combinations should be as shown in Table 204.8 (12 foot lanes, one 8 foot shoulder and one 5 foot shoulder). Freeway mainline lane widths during construction will be reduced to 11 ft. and shoulders will be reduced to as little as 2 ft.
- Index 504.3: The preferred minimum distance between ramps and local roads should be 500 ft but is 330 ft between Agoura Road and the southbound ramps.

Alternative 4: Expanded Diamond Alternative



Figure 4: Expanded Diamond

Alternative 4 features an expanded diamond interchange with the extension from 2 vehicular lanes to 5 lanes on the Lost Hills Road overcrossing (two lanes in each direction plus dedicated left turn pockets for both northbound and southbound ramps). This alternative would replace the existing overcrossing, but maintain the same diamond interchange.

This alternative would widen the overcrossing from approximately 32 feet to approximately 74 feet and its height from approximately 15 feet to approximately 19

feet. This widened and heightened bridge would obstruct more views of the natural landscape for pedestrians, local residents, and motorists and therefore is considered as a negative visual impact.

Under this alternative, more vehicles could be accommodated on the overpass with the widening of the bridge. The level of negative visual impact would be determined depending on the amount of vehicles traveling on the lanes – the more vehicles occupying the travel lanes, the greater the degree that the vehicles would obstruct pedestrians' and motorists' views of the landscape.

The alignment of Alternative 4 would not change the turning movements of the vehicles and therefore would not affect the existing moving headlight glare to the cross traffic and residences.

In this alternative, several Mandatory Design standards are not met:

- Index 201.1: Stopping Site Distance for all elements of interchanges and intersections at grade shall follow Table 201.1 and is 360 ft. for a standard design speed of 45 mph for Lost Hills Road. The design speed of Lost Hills Road for this alternative is 37 mph. The Stopping Site Distance for a design speed of 37 mph is 274 ft.
- Index 202.2: Standard superelevation rates shall be based on Table 202.2 for a given range of radii. Standard superelevation rates for Lost Hills Road are 0.03 to 0.04. Figure 202.2 was used to confirm that the crowned section as proposed meets the criteria for the maximum comfortable speed for the design radii.
- Index 501.3: The Standard spacing between freeway interchanges is 1 mile. The existing spacing between Lost Hills Road and Las Virgenes Road to the east is 0.82 miles and Liberty Canyon Road to the west is 0.87 miles.

southbound off-ramp to Agoura Road is 380 ft, 385 ft between the southbound ramps and Canwood Street, and 70 ft between the northbound on-ramp and Canwood Street.

Additionally, several Advisory Design standards are not met:

- Index 101.1: Design speed should be 45 mph, but the Expanded Interchange design speed is 37 mph.
- Index 204.4: Vertical curves for this design speed should have a minimum length of 374' but this alternative provides a curve with a length of 361'.
- Index 204.8: The normal minimum width of traffic openings and required falsework spans for various lane and shoulder combinations should be as shown in Table 204.8 (12 foot lanes, one 8 foot shoulder and one 5 foot shoulder). Freeway mainline lane widths during construction will be reduced to 11 ft. and shoulders will be reduced to as little as 2 ft.
- Index 504.3: The standard minimum distance between ramps and local roads should be 500 ft, but is 70 ft between Canwood and the northbound ramps, 385 ft between the southbound ramps and Canwood Street, and 380 ft between Agoura Road and the southbound ramps.

Alternative 5: Partial Cloverleaf Alternative



Figure 5: Partial Cloverleaf

Alternative 5 proposes a partial cloverleaf interchange by adding a partial cloverleaf ramp configuration for the northbound Lost Hills Road to the US-101 northbound access. This Alternative replaces the existing on/off-ramp in the northeast quadrant of the proposed project area.

Similar to Alternative 4, the overcrossing would be widened from approximately 32 feet to approximately 74 feet, and its height increased from approximately 15 feet to approximately 19 feet. This bridge widening would obstruct more of the view of the

natural landscape for pedestrians, local residents and drivers, and therefore is considered as a negative visual impact.

Other negative aspects with this alternative include the expanded diamond interchange's requirement for right of way acquisition. The expansion of the right of way (9,500 square meters) would create a negative visual impact as more of the natural landscape would be eliminated.

This alternative would also necessitate the addition of a merging lane in the US-101 northbound direction which would contribute a negative visual aspect due to the loss of natural landscape and the additional vehicles traveling in the area.

Alternative 5 also would require cutting into the hillside in the northeast quadrant; thereby creating a potential negative visual impact for pedestrians, local residents, motorists, and other local users to their view of the natural landscape.

Canwood Street would need to be closed from Parkville Road to Lost Hills Road to meet Caltrans design standards. To compensate, Driver Avenue (from Parkville Road to Lost Hills Road) would be upgraded and opened to the public. The visual impact would be either positive or negative to motorists, pedestrians, and local users, depending on what elements are placed along the closed Canwood Street and improved Driver Avenue. Depending on the upgrade design of Driver Avenue, a negative visual would most likely to occur due to the elimination of natural landscape.

Closely spaced intersections pose safety issues and poor circulation issues as the short roadway length between the intersections do not provide the standard stopping sight distances for the speed of the traffic flow and do not provide enough space for the amount of vehicular traffic on the roadway causing blocked intersections. Increasing the distance between intersections creates better traffic flow by preventing traffic from blocking the intersections. Increasing the distance between intersections will also improve safety by providing the appropriate stopping sight distance.

In this alternative, several Mandatory Design standards are not met:

- Index 201.1: Stopping Site Distance for all elements of interchanges and intersections at grade shall follow Table 201.1 and is 360 ft. for a standard design speed of 45 mph for Lost Hills Road. The design speed of Lost Hills Road for this alternative is 35 mph. The Stopping Site Distance for a design speed of 35 mph is 250 ft.
- Index 202.2: Standard superelevation rates shall be based on Table 202.2 for a given range of radii. Standard superelevation rates for Lost Hills Road are 0.03 to 0.04. Figure 202.2 was used to confirm that the crowned section as proposed meets the criteria for the maximum comfortable speed for the design radii.
- Index 501.3: The Standard spacing between freeway interchanges is 1 mile. The existing spacing between Lost Hills Road and Las Virgenes Road to the east is 0.82 miles and Liberty Canyon Road to the west is 0.87 miles. In addition, Design Information Bulletin Number 77 calls for a minimum weaving length of 2,000 ft and the weaving length between the northbound on-ramp at Lost Hills Road and the northbound off-ramp at Liberty Canyon Road would be 1,820 ft.

HDM 504.3: The standard minimum distance (curb return to curb return) between ramp intersections and local road shall be 400 ft. In the proposed design the separation between Driver Road and the northbound off-ramp is only 300 ft, and is 375 ft between Agoura Road and the southbound off-ramp.

Additionally, several Advisory Design standards are not met:

- Index 101.1: Design speed should be 45 mph, but the Partial Cloverleaf Interchange design speed is 35 mph.
- Index 202.5: The superelevation transition runoff standard calls for two-thirds of runoff to be on a tangent, however, the proposed design has no tangent between a reversing curve on the proposed northbound off-ramp.
- Index 202.5: The superelevation transition runoff standard 202.5A is 300 ft runoff, but proposed runoff is 6% per 100 ft.
- Index 202.5: The superelevation transition runoff standard 202.5A requires a +12% superelevation rate for the curves on the proposed northbound off-ramp, but proposed superelevation is -8% at the point of reverse curvature.
- Index 204.8: The normal minimum width of traffic openings and required falsework spans for various lane and shoulder combinations should be as shown in Table 204.8 (12 foot lanes, one 8 foot shoulder and one 5 foot shoulder). Freeway mainline lane widths during construction will be reduced to 11 ft. and shoulders will be reduced to as little as 2 ft.
- Index 504.3: The preferred minimum distance between ramps and local roads should be 500 ft. In the proposed design the separation between Driver Road and the northbound off-ramp is only 300 ft, and is 375 ft between Agoura Road and the southbound off-ramp.

Alternative 6: Full Standard Expanded Diamond Alternative

Alternative 6 features a full diamond interchange to eliminate non-standard features.



Figure 6: Full Standard Expanded Diamond

Similar to Alternative 4 (expanded diamond interchange), the overcrossing would be widened from approximately 32 feet to approximately 74 feet and its height increased from approximately 15 feet to approximately 19 feet. This bridge widening would obstruct more of the view of the natural landscape for pedestrians, local residents, and motorists, and therefore is considered as a negative visual impact.

The difference between Alternative 4 and this alternative is that this design would require the closure of Canwood Street and require

the design of a new street. The closure/relocation of Canwood Street would provide conditions for an increased traffic speed along Lost Hills Road, thereby reducing motorists' viewing time exposure to the immediate area.

The alignment of Alternative 6 would not change the turn movements of the vehicles and therefore would not affect the existing moving headlight glare to the cross traffic and residences.

In this alternative, several Mandatory Design standards are not met:

- Index 201.1: Stopping Site Distance for all elements of interchanges and intersections at grade shall follow Table 201.1 and is 360 ft. for a standard design speed of 45 mph for Lost Hills Road. The design speed of Lost Hills Road for this alternative is 42 mph. The Stopping Site Distance for a design speed of 42 mph is approximately 24 ft.
- Index 202.2: Standard superelevation rates shall be based on Table 202.2 for a given range of radii. Standard superelevation rates for Lost Hills Road are 0.03 to 0.04. Figure 202.2 was used to confirm that the crowned section as proposed meets the criteria for the maximum comfortable speed for the design radii.
- Index 501.3: The Standard spacing between freeway interchanges is 1 mile. The existing spacing between Lost Hills Road and Las Virgenes Road to the east is 0.82 miles and Liberty Canyon Road to the west is 0.87 miles.
- Index 504.3: The standard separation of ramps and intersection (curb return to curb return) is 400 ft. In the proposed design the separation between Agoura Road and the southbound off-ramp is 380 ft.

Additionally, several Advisory Design standards are not met:

- Index 101.1: Design speed should be 45 mph, but the design speed is 42 mph.
- Index 204.8: The normal minimum width of traffic openings and required falsework spans for various lane and shoulder combinations should be as shown in Table 204.8 (12 foot lanes, one 8 foot shoulder and one 5 foot shoulder). Freeway mainline lane widths during construction will be reduced to 11 ft. and shoulders will be reduced to as little as 2 ft.
- Index 504.3: The standard separation of ramps and intersections (curb return to curb return) is 500 ft. In the proposed design the separation between Agoura Road and the southbound off-ramp is 380 ft.

Alternative 7: Cloverleaf Alternative

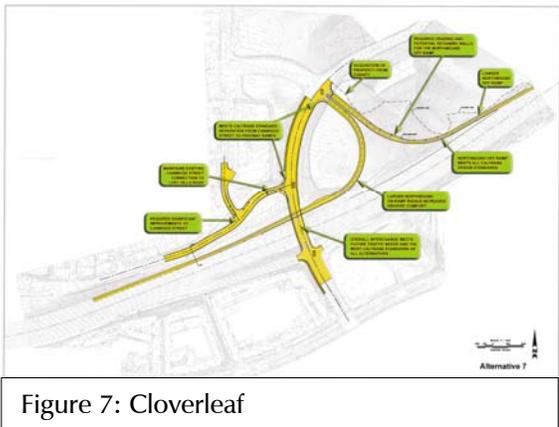


Figure 7: Cloverleaf

Alternative 7 proposes a cloverleaf interchange ramp configuration for the northbound Lost Hills Road to US-101 northbound access.

Similar to Alternatives 4 and 6, the overcrossing would be widened from approximately 32 feet to approximately 74 feet and its height increased from approximately 15 feet to approximately 19 feet. This bridge widening would obstruct more of the view of the natural landscape for pedestrians, local residents, and motorists,

and therefore is considered as a negative visual impact.

This alternative would require cutting into the hillside in the northeast quadrant; thereby creating a potential negative visual impact for pedestrians, local residents, motorists, and other local users to their view of the natural landscape. Additionally, this alternative would not require the closure/relocation of Canwood Street.

In this alternative, several Mandatory Design standards are not met:

- Index 201.1: Stopping Site Distance for all elements of interchanges and intersections at grade shall follow Table 201.1 and is 360 ft. for a standard design speed of 45 mph for Lost Hills Road. The design speed of Lost Hills Road for this alternative is 40 mph. The Stopping Site Distance for a design speed of 40 mph is 300 ft.
- Index 202.2: Standard superelevation rates shall be based on Table 202.2 for a given range of radii. Standard superelevation rates for Lost Hills Road are 0.03 to 0.04. Figure 202.2 was used to confirm that the crowned section as proposed meets the criteria for the maximum comfortable speed for the design radii.
- Index 501.3: The Standard spacing between freeway interchanges is 1 mile. The existing spacing between Lost Hills Road and Las Virgenes Road to the east is 0.82 miles and Liberty Canyon Road to the west is 0.87 miles.
- HDM 504.3: The standard minimum distance (curb return to curb return) between ramp intersections and local road shall be 400 ft. In the proposed design the separation between Canwood Street and the southbound ramps is 360 ft, and is 375 ft between Agoura Road and the southbound ramps.

Additionally, several Advisory Design standards are not met:

- Index 101.1: Design speed should be 45 mph, but the Cloverleaf Interchange design speed is 40 mph.

- Index 204.8: The normal minimum width of traffic openings and required falsework spans for various lane and shoulder combinations should be as shown in Table 204.8 (12 foot lanes, one 8 foot shoulder and one 5 foot shoulder). Freeway mainline lane widths during construction will be reduced to 11 ft. and shoulders will be reduced to as little as 2 ft.
- Index 504.3: The preferred minimum distance between ramps and local roads should be 500 ft. In the proposed design the separation between Canwood Street and the southbound ramps is 360 ft, and is 375 ft between Agoura Road and the southbound ramps.

III. ASSESSMENT METHOD

The process used in this visual impact study generally follows the guidelines outlined in the publication "Visual Impact Assessment for Highway Projects", Federal Highway Administration (FHWA), March 1981.

The six steps required to assess visual impacts were performed. They are as follows:

1. Define the project setting and viewshed.
2. Identify key views for visual assessment.
3. Analyze existing visual resources and viewer response.
4. Depict the visual appearance of project alternatives.
5. Assess the visual impacts of project alternatives.
6. Propose methods to mitigate adverse visual impacts.

IV. VISUAL ENVIRONMENT OF THE PROJECT

A. Project Setting

The regional landscape establishes the general visual environment of the project; however, the specific visual environment upon which this assessment focuses on is being determined by the defining landscape units and the project viewshed.

Regional Setting

The US-101, a major north-south highway, extends from Los Angeles, California to Olympia, Washington. It was constructed in 1926 and is 1,540 miles long. The segment known as the "Ventura Freeway" links the communities of Los Angeles and Ventura counties and is located between State Route 1 (west of Ventura) and State Route 170 (in Studio City). A portion of the highway is also identified as "El Camino Real" where its route along the Southern and Central California coastline approximates the route linking the Spanish Missions. The US-101 was once the major north-south transportation route along the Pacific coast. It still receives major usage as a highway between Los Angeles and San Francisco. The US-101 is listed in the State's Scenic Highways system as being eligible for future listing as a Scenic Highway, but is currently not officially designated as such. **(See Figure 8.)**

In Southern California, US-101 serves as a heavily traveled route for residents and commuters from the Greater Los Angeles area and Ventura County communities. It becomes the “Hollywood Freeway” north of Downtown Los Angeles before it turns into the “Ventura Freeway”. Major California cities transected by the highway include Los Angeles, Thousand Oaks, Oxnard, Ventura, Santa Barbara, Santa Maria, San Luis Obispo, Salinas, San Jose, San Francisco, Santa Rosa, Ukiah and Eureka. Cities surrounding the Project site include Hidden Hills, Agoura Hills, Westlake Village, Thousand Oaks, Camarillo, Oxnard, and Ventura.

Los Angeles County, California

The City of Calabasas is located within Los Angeles County. Los Angeles County is situated in Southern California which is in the southwestern region of the United States. Los Angeles County was one of the original counties in California - founded in 1850 with a total area of 4,752 square miles. Of the total area, approximately 85% (4,039 square miles) is available for land use while the remaining approximately 15% (713 square miles) is water. The County is considered by far the most populous county in the United States. The U.S. Census Bureau estimates the Los Angeles County population to be 9,862,049 for 2008. Los Angeles is the county seat of Los Angeles County.

While 40% of Los Angeles County is officially desert, the majority of the southern portion of the County is urbanized. Most of the population in the County is located in the south and southwest. The Los Angeles Basin, San Fernando Valley, and San Gabriel Valley are where the population concentrations are found. In 2004, the County had a population larger than the individual populations of 42 states.

Los Angeles County has numerous natural landscapes such as rivers, valleys, forests, lakes, islands and desert areas. The major rivers include the Los Angeles River, the San Gabriel River and the Santa Clara River. The mountain ranges include the Santa Monica Mountains and the San Gabriel Mountains.

Calabasas, California

The City of Calabasas is located in the western part of Los Angeles County, California (US Southwest). It is 129 square miles with elevations ranging from 500’ to 2800’.

The City of Calabasas has the typical California warm summer and cooler winter. The average winter temperatures range is lows in the low 40s (°F) to highs in the high 60s (°F) and average summer temperatures range from the low 60s (°F) to the high 90s (°F). There are approximately 284 sunny days annually and an average rainfall of about 14”.

Within the City of Calabasas, the median age is 40 (the median age in the United States is 38) and the average household size is 2.79 people. For transportation, the average one-way commute takes 36 minutes and 84% of the drivers commute alone. The combination of rapid population growth and the predicted increase of commuters in the future lead to the conclusion that the existing Lost Hills Road Overcrossing is inadequate with its narrowly spaced intersections and the high flows of cross-traffic.



Figure 8
 Ventura Freeway/Lost Hills Road Interchange
 EA 07-242300 PM 31.9/32.3, KP 51.1/51.6
PROJECT LOCATION AND VICINITY

Project Area Setting

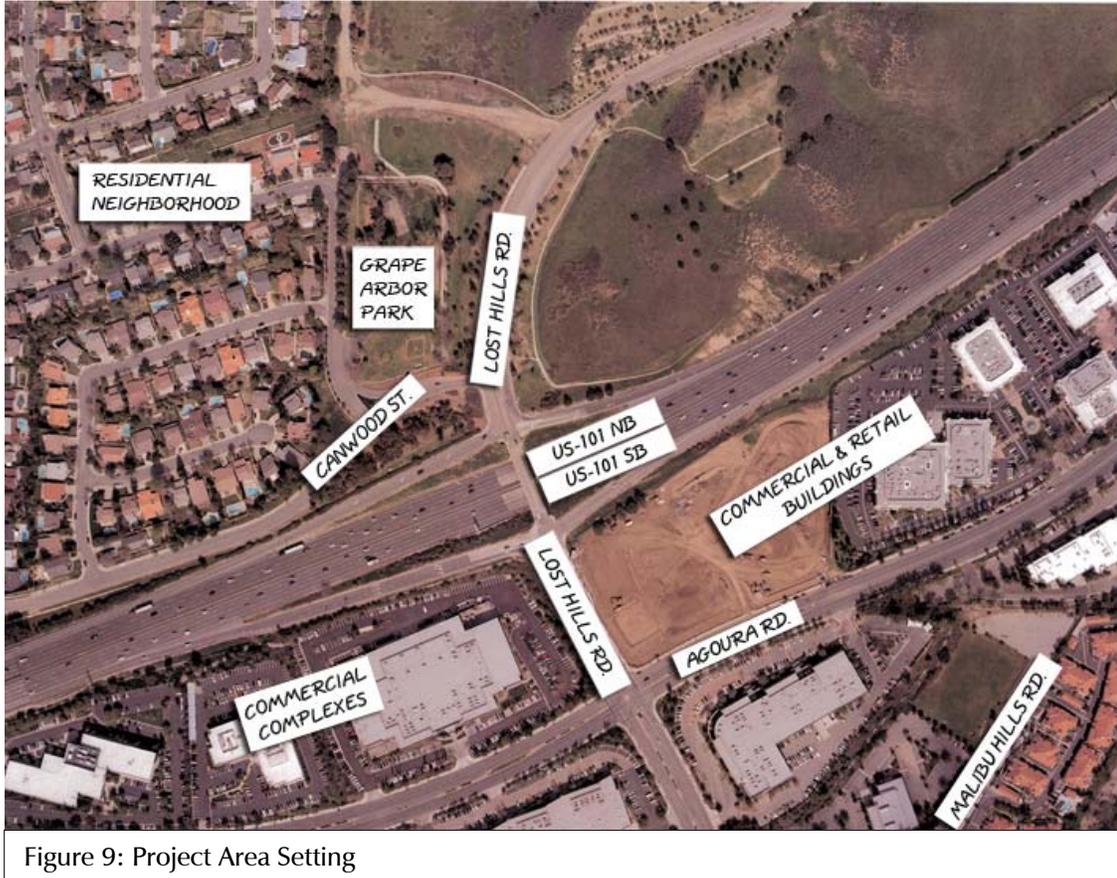


Figure 9: Project Area Setting

The project site is at the intersection of US-101 and Lost Hills Road in the City of Calabasas. It is bordered by a residential neighborhood, park, and landfill on the north and commercial office and retail buildings on the south. (See Figure 9.)

Lost Hills Road is a north-south arterial street that extends from the landfill north of Canwood Street to its southerly termination as Las Virgenes Road. At the north end (at the landfill) it begins as a two lane restricted road which then widens to three lanes (two in the northbound direction) north of the entry gate for the landfill. Lost Hills Road widens from three lanes to four lanes (two lanes in each direction) a little north of Canwood Street. As Lost Hills Road continues south, it narrows down to two lanes (one lane in each direction) as it crosses over US-101 and then widens back to four lanes and remains four lanes until its terminus at Las Virgenes Road. Agoura Road, Malibu Hills Road, Calabasas Hills Road/Meadow Creek Lane, and Las Virgenes Road are the only roads that bisect Lost Hills Road. Additional access points to southbound Lost Hills Road include Canwood Street (residential access), US-101 on- and off-ramps, business driveways at John Paul Richard and Esoterix, Cold Springs Road (residential access) and DeAnza Park. Additional access points to northbound Lost Hills Road include US-101 on- and off-ramps, driveways at Spirent Communications and a business park, Steeplechase (residential access), and El Encanto Drive (residential access).

Motorists travelling along Lost Hills Road are subject to traffic controls in several locations: signal control at the on- and off-ramps of US-101, Agoura Road, and Las Virgenes Road and sign controls at Cold Springs Street and Calabasas Hills Road/Meadow Creek Lane.

North of the highway along Lost Hills Road, just past Canwood Street, is Grape Arbor Park. This park provides recreation services to the adjacent neighborhood of single family detached homes located on the west side of the road. A natural hillside along the west side of Lost Hills Road slopes down towards the park and neighborhood. The road continues north and terminates at the landfill.

The south side of the highway has commercial complexes to the west of Lost Hills Road and commercial and retail buildings to the east.

B. Landscape Units (See Figure 10)

A landscape unit is a portion of the regional landscape and can be thought of as an outdoor room that exhibits a distinct visual character. A landscape unit will often correspond to a place or district that is commonly known among local viewers.

Residential Landscape Unit: This landscape unit, is solely residential and lies isolated to the northwest of the Lost Hills Interchange. **(See Figure 11.)**

Commercial Landscape Unit: In this landscape unit, the areas within the project right-of-way will be in open view from the retail development to the southeast. **(See Figure 12.)**



Figure 10
LOCATIONS OF LANDSCAPE UNITS

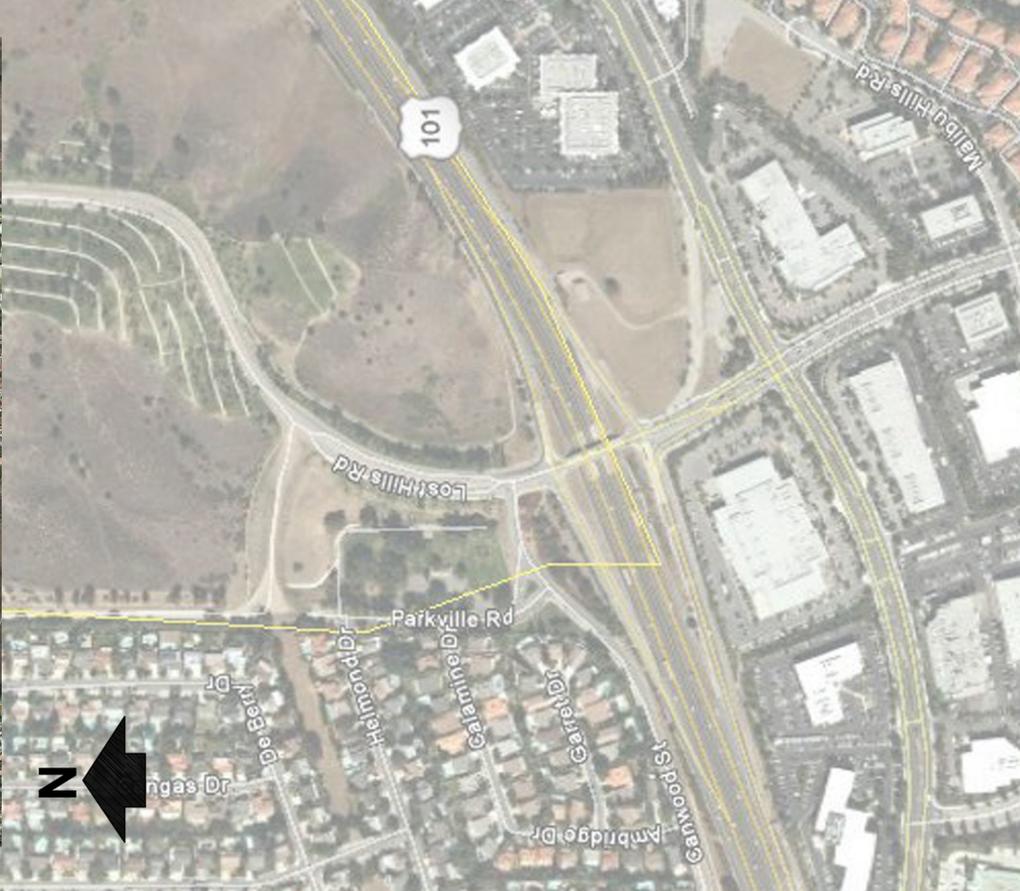


Figure 12: Commercial Landscape Unit

C. Project Viewshed

A viewshed is a subset of a landscape unit and is comprised of all the surface areas visible from an observer's viewpoint. The limits of a viewshed are defined as the visual limits of the views located from the proposed project. The viewshed also includes locations visible by viewers in the proposed project's site that are likely to be affected with visual changes brought about by the proposed project.

The Santa Monica Mountains fall within the viewshed limit of this project. The Santa Monica Mountains are part of the Los Angeles Ranges, located in Southern California. The range extends approximately 40 miles (64 kilometers) from east to west, and transverses from the Hollywood Hills in Los Angeles to Point Mugu in Ventura County. The mountains create a barrier between the San Fernando Valley and the Los Angeles Basin. Calabasas Peak rises to the south of the project and is approximately 2,165 feet (660 meters) high.

V. EXISTING VISUAL RESOURCES AND VIEWER RESPONSE

A. FHWA Method of Visual Resource Analysis

Identify Visual Character (of the area in general) – Identification of the visual character is strictly descriptive and non-evaluative, this means it is based on defined attributes that are not judged as good or bad. A change in visual character can not be described as having good or bad attributes unless it is compared with the viewer response to that change. If there is public preference for the established visual character of a regional landscape or resistance to the project due to contrast in the visual character, then the changes in the visual character can be evaluated.

Assess Visual Quality – Visual quality is evaluated by identifying the vividness, intactness, and unity present in the viewshed. FHWA states that this method should correlate with public review and comment procedures of visual quality well enough that it can predict those judgments. This approach is particularly useful in highway planning because it does not presume that a highway project is necessarily a negative visual impact. The potential for the addition of a soundwall on this project is taken into consideration in this assessment.

This approach to evaluating visual quality can also help identify specific methods for mitigating each adverse impact that may occur as a result of a project. The three criteria for evaluating visual quality can be defined as follows:

1. **Vividness** is the visual power or memorability of landscape components as they combine in distinctive visual patterns.
2. **Intactness** is the visual integrity of the natural and man-made landscape and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.

3. **Unity** is the visual coherence and compositional harmony of the landscape unit considered as a whole. It frequently attests to the careful design of individual manmade components in the landscape unit.

B. Existing Visual Resources

1. Existing Visual Character

Residential Landscape Unit: Residential improvement is the characteristic development type in this landscape unit. Local residents play an important role in this assessment. They are expected to have moderately high concerns regarding the project and how much change it will have on their views.

Commercial Landscape Unit: This unit includes surrounding commercial and industrial buildings. Buildings are mostly offices, but also include a new commercial center (The Summit) that will be built and opened in the future. All users are expected to have moderate concerns of how much the landscape changes within their views.

2. Existing Visual Quality

<u>Landscape Unit</u>	<u>Existing Visual Quality</u>
<u>Residential Unit</u>	Visual Quality: The overall visual quality is Low. Rolling hills and blue skies (weather permitting) dominate the background. Views in the direction of the site were obstructed by the hilly slope. Even though many houses are within close proximity to the freeway, the higher topography of the interchange does not allow residents to have an open view.
	Vividness: The visual power or memorability of landscape components is Low. Since the visual quality is minimal, the vividness will be Low as well.
	Intactness: The visual integrity of both the natural and built landscape is primarily Low. Occasional above-ground utilities and power lines occupy the foreground and therefore contribute to a Low visual integrity.
	Unity: The visual coherence and compositional harmony of the natural and built landscape as a whole is considered as Moderately High. There is coherence in the natural and built landscape.
<u>Commercial Unit</u>	Visual Quality: The overall visual quality is Low. Although rolling hills and blue skies (weather permitting) occupy the background, utilities, traffic, and street lights often occupy the foreground and contribute to a Low visual quality.
	Vividness: The memorability of the interchange is Moderate, especially for the users from the new commercial center directly facing the interchange.
	Intactness: The visual integrity of the landscape is Moderate.

Landscape Unit	Existing Visual Quality
	The integrity of natural and built landscapes throughout the area is preserved.
	Unity: The harmony of the urban landscape is Moderate. The plantings complement and blend with the buildings throughout the whole project area.

C. Methods of Predicting Viewer Response

Viewer response is composed of two elements: viewer sensitivity and viewer exposure. These elements combine to form a method of predicting how the public might react to the visual changes brought about by a project.

Viewer sensitivity is defined both as the viewers’ concern for scenic quality and the viewers’ response to change in the visual resources that make up the view. Local values and goals may influence visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. Even when the existing appearance of a project site is uninspiring, a community may still object to a project that falls short of its visual goals through a public review and comment process.

Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of their view, speed at which the viewer moves, and position of the viewer. High viewer exposure heightens the importance of early consideration of design, art, and architecture and their roles in managing the visual resource effects of a project.

D. Existing Viewer Sensitivity

The City of Calabasas has established “Scenic Corridor Guidelines” for areas within the City designated as “Scenic Corridors.” These regulations are aimed at preserving both the visual and environmental quality of established communities. The regulations exhibit common themes in the importance of preserving the existing vegetation and historic character. Through the use of its “Scenic Corridor Guidelines,” the City confirms its awareness and sensitivity to visual and aesthetic elements within the community and also demonstrates its dedication to the preservation of the visual quality of Calabasas.

E. Existing Viewer Groups, Viewer Exposure, and Viewer Awareness

Freeway Travelers: Like all other typical Southern California traffic, there is an enormous amount of vehicles that pass by the project each day. During non-prime commuting times, the Project interchange may be passed with little motorist awareness at the posted highway speed.

However, during prime commuting hours, daily commuters between Ventura County and Los Angeles County may have an increased awareness of views from the highway due to the amount of time they are exposed to the corridor while commuting each day. Due to congested traffic, the travelling speed decreases and the average exposure time increases. Motorists have a longer opportunity to focus their attention on the highway and its surrounding elements. When traveling at posted speeds, drivers tend to focus on long- to mid-range views directly ahead while passengers have more time to observe a much wider range of views than the drivers.

The Summit Workers and Visitors: The Summit project involves the development of a commercial center with 5 commercial/retail buildings. The gross commercial space is approximately 70,100 square feet. The Summit's site is located at the northeast corner of the Lost Hills Road and Agoura Road intersection (at 26787 Agoura Road) – southeast of the Project. Two outdoor plazas would be included in the project: one in front of and one in between the buildings. Water features are proposed to be constructed near the plazas. The Summit project includes an approximately 124,513 square foot parking lot that can accommodate 281 standard parking spaces. Onsite parking would also include six off-street loading/unloading areas and on-site bicycle racks to accommodate up to 20 bicycles.

Industrial and Warehouse workers: Industrial and warehouse workers are considered the group that would have the least amount of concern for the visual impact from the Project. Due to their constant focus on production and increasing efficiency, they would have minimal concerns regarding any changes outside of the buildings. Furthermore, the lack of windows in these buildings prevents the workers from seeing the landscape unit outside of their buildings.

Community Residents: There are approximately 270 residential households adjacent to the US-101 on the northwest side of the Lost Hills Road Interchange, specifically in the residential landscape unit. Although many homes are within close proximity to the highway, the higher topography in between the homes and the interchange does not allow the residents to directly view the highway. Homes that are near the northbound on-ramp can view the highway due to the highway being above the first row of residences. Residents can view no more than the top of the slope and will have a minimal view of the highway. However, as Canwood Street is the main road that residents use to access the community, the Key Observation Point (KOP) located on Canwood Street becomes very important and local residents will play a crucial role in this assessment.

Residents are expected to have a high level of concern about the project and its effect on the views from their neighborhoods and homes. In addition, residents will have a high level of concern about the views from the highway into their community even though the views would be expected to be of short duration.

Local Street Users: Drivers, bicyclists, and pedestrians have intermittent views into the corridor and interchange. As this user group travels at much slower speeds than the average highway motorist, it is expected that they will have a greater awareness of changes to the visual environment than the highway motorist. Views to the interchange by this group of viewers would be focused on the foreground.

Grape Arbor Park Users: The park users can be expected to have a high level of concern as the majority of the park users are expected to be local residents. Although this park user group has partially obscured views, they are the closest to the Project site for short term durations and would have a more intimate viewing experience.

VI. VISUAL IMPACT ASSESSMENT

A. Method of Assessing Project Impacts

The visual impacts of project alternatives are determined by assessing the visual resource changes due to the project and predicting viewer response to that change.

Visual resource change is the sum of the change in visual character and the change in visual quality. The first step in determining visual resource change is to assess the compatibility of the proposed project with the visual character of the existing landscape. The second step is to compare the visual quality of the existing resources with projected visual quality after the project is constructed.

The viewer response to project changes is the sum of viewer exposure and viewer sensitivity to the project as determined in the preceding section.

The resulting level of visual impact is determined by combining the severity of resource changes with the degree to which people are likely to be exposed to the changes and potentially oppose them.

B. Definition of Visual Impact Levels

Low – Minor adverse change to the existing visual resource, with low viewer response to change in the visual environment. May or may not require mitigation.

Moderate – Moderate adverse change to the visual resource with moderate viewer response. Impact can be mitigated within five years using conventional practices.

Moderately High – Moderate adverse visual resource change with high viewer response or high adverse visual resource change with moderate viewer response. Extraordinary mitigation practices may be required. Landscape treatment required will generally take longer than five years to mitigate.

High – A high level of adverse change to the visual resource or a high level of viewer response to visual change such that architectural design and landscape treatment cannot mitigate the impacts. Viewer response level is high. An alternative project design may be required to avoid highly adverse impacts.

C. Analysis of Build Alternatives

Each of the seven different alternatives proposed for consideration have been evaluated for their overall visual impact.

Alternative 1: No-Build Alternative

Since this alternative does not require any demolition or building, no positive or negative visual impact would be produced at the Project site. The overall visual impact would be inconsequential as the existing visual characteristics would remain the same and no additional impacts at the selected Key Observation Points would occur.

Alternative 2: Transportation System Management Alternative

This Alternative assumes that minimal improvement would be made within the Project. No additional signal lights would be added; however, there could be the addition of some small hardware on the existing signals for video detection upgrades. These hardware additions would not effectively change the visual impact of the project and therefore, the overall visual impact for this alternative would be Low.

Alternative 3: Roundabout Alternative

The circular design of a roundabout would be more visible than the existing configuration due to the amount of area required for the road junctions. The uniqueness of the traffic circle would increase the built characteristic of the view. The overall visual impact would be Moderate.

Alternative 4: Expanded Diamond Alternative

The alignment of Alternative 4 would not change the turning movements of the vehicles and therefore would not affect the existing moving headlight glare to the cross traffic and residences. The overall visual impact of this diamond interchange would be Low.

Alternative 5: Partial Cloverleaf Alternative

The closure of Canwood Street from Parkville Road to Lost Hills Road and the upgrading and opening to the public of Driver Avenue (from Parkville Road to Lost Hills Road) would be either positive or negative to motorists, pedestrians, and local users, depending on what elements are placed along the closed Canwood Street and improved Driver Avenue. Depending on the upgrade design of Driver Avenue, a negative visual would most likely to occur due to the elimination of natural landscape. Therefore, the overall visual impact of Alternate 5 would be Moderate.

Alternative 6: Full Standard Expanded Diamond Alternative

The alignment of Alternative 6 would not change the turn movements of the vehicles and therefore would not affect the existing moving headlight glare to the cross traffic and residences. The overall visual impact of this diamond interchange would be Low.

Alternative 7: Cloverleaf Alternative

This alternative would require cutting into the hillside in the northeast quadrant; thereby creating a potential negative visual impact for pedestrians, local residents, motorists, and other local users to their view of the natural landscape. Additionally, this alternative would not require the closure/relocation of Canwood Street. The overall visual impact of this alternative would be Moderate.

D. Analysis of Key Views

Seven different alternatives have been proposed for consideration. However, as the City has expressed their preference for the cloverleaf design of Alternative 7, the remainder of this assessment will specifically address only Alternative 7.

Because it is not feasible to analyze all the views in which the proposed project would be seen, it is necessary to select a small number of key viewpoints that would most clearly display the visual effects of the project. Key Observation Points (KOP) should also represent the primary viewer groups that would potentially be affected by the project.

The key view locations are shown in **Figure 10**.

Key Observation Point-1 (KOP-1) (See Figure 13.):

Orientation: KOP-1 is located approximately 0.5 miles west of the Lost Hills interchange on Agoura Road (south of the freeway). The existing view from KOP-1 is shown in Figure 12. KOP-1 is representative of the view looking northeast from Agoura Road. This viewpoint is where eastbound Agoura Road runs parallel to US-101 for a short stretch and heads downhill. With the proximity to the US-101 and the downhill angle, eastbound motorists on Agoura Road would have a fairly unobstructed view of the Project site.

Existing Visual Quality/Character: This location is very vivid and has an open view to the northwest quadrant of the Project site. Views to the northeast and southeast quadrants of the Project site are obstructed by Lost Hills Road.

Proposed Project Features: The existing Lost Hills Road overcrossing would be widened and built at a higher elevation. In the northeast quadrant, a cloverleaf would be added as a northbound on-ramp and a northbound off-ramp would also be added (just to the north of the cloverleaf). Both on/off-ramp would be located north of their existing locations.

Motorists traveling along the US-101 northbound and southbound on- and off-ramps would be subject to traffic light controls as they ingress onto and egress from Lost Hills Road. Motorists on Canwood Street as well as Lost Hills Road would be subject to traffic light controls at the T-intersection of Canwood Street with Lost Hills Road.

Change to Visual Quality/Character: The character of KOP-1 would change only slightly due to the proposed widening of Lost Hills Road. Another consideration is that a retaining wall could potentially be located along the cloverleaf. In that case, depending on the height of the retaining wall, the wall may or not be visible from KOP-1.

Viewer Response: Bicyclists, pedestrians, motorists and building users on Agoura Road would view the highway interchange each day. However, due to the sloping nature of the road at KOP-1 and the distance between the travelers along Agoura Road and the project site, the travelers will tend to focus on the up/downhill of the road and pay less attention looking out of the way towards the proposed Project site. The views to the southeast and southwest are obstructed by the existing trees. The vividness and visibility on the overcrossing in the northeast and northwest quadrant are likely to be Low because of the angle of the Project location.

Resulting Visual Impact: The change to the visual quality would be Low to Moderate. The overall visual impact would be Low to Moderate.

Existing



Proposed Mitigation



Figure 13: Key Observation Point (KOP) 1

Key Observation Point-2 (KOP-2) (See Figure 14.):

Orientation: KOP-2 is located approximately 0.3 miles southwest of the Lost Hills Interchange on the southbound side of the freeway. The existing view of this KOP is shown on Figure 12.

Existing Visual Quality/Character: This location provides for vivid and picturesque views with rolling hills in the background looking to the northeast towards the northwest. The views to the northwest become obstructed by trees in the foreground. All views to the south sides are obstructed by buildings.

Proposed Project Features: The existing Lost Hills Road overcrossing would be widened and built at a higher elevation. In the northeast quadrant, a cloverleaf would be added as a northbound on-ramp and a northbound off-ramp would also be added (just to the north of the cloverleaf). Both on/off-ramp would be located north of their existing locations.

Motorists traveling along the US-101 northbound and southbound on- and off-ramps would be subject to traffic light controls as they ingress onto and egress from Lost Hills Road. Motorists on Canwood Street as well as Lost Hills Road would be subject to traffic light controls at the T-intersection of Canwood Street with Lost Hills Road.

Change to Visual Quality/Character: The character of the KOP-2 would change only slightly with the widening of Lost Hills Road. Another consideration is that a retaining wall could potentially be located along the cloverleaf. In that case, depending on the height of the retaining wall, the wall may or not be visible from KOP-2.

Viewer Response: A large amount of southbound motorists would view the northwest and southwest quadrants each day they commute. They would have brief views of the northeast and southeast quadrants; however, the southbound commuters might have an increasing awareness of the views along the highway with increasing traffic conditions and the ensuing slowing speeds. Sensitivity to this change in the visual environment could vary from Low to Moderate based on the traveling speed of the commuters. The viewer response is expected to be Moderate along the very short length of this element.

Resulting Visual Impact: The adverse change to the visual quality would be Low to Moderate. The overall visual impact would be Low to Moderate.

Existing



Proposed Mitigation



Figure 14: Key Observation Point (KOP) 2

Key Observation Point-3 (KOP-3) (See Figure 15.):

Orientation: Located at the intersection of Lost Hills Road and Canwood Street, this KOP serves as a major outlook point for the Calabasas residents located to the northwest of the Project. The existing view of this KOP is shown on Figure 11.

Existing Visual Quality/Character: The location is at approximately the same elevation as the proposed improvements. This location provides a somewhat obstructed view to the northeast by the existing trees and better views to the northwest. The views to the southeast are vivid and somewhat obstructed to the southwest by existing trees.

Proposed Project Features: The existing Lost Hills Road overcrossing would be widened and built at a higher elevation. In the northeast quadrant, a cloverleaf would be added as a northbound on-ramp and a northbound off-ramp would also be added (just north of the cloverleaf). Both on/off-ramps would be located north of their existing locations.

Motorists traveling along the US-101 northbound and southbound on- and off-ramps would be subject to traffic light controls as they ingress onto and egress from Lost Hills Road. Motorists on Canwood Street as well as Lost Hills Road would be subject to traffic light controls at the T-intersection of Canwood Street with Lost Hills Road.

Change to Visual Quality/Character: The character of the KOP-3 would change moderately with the widening of Lost Hills Road. Another consideration is that a retaining wall could potentially be located along the cloverleaf. In that case, depending on the height of the retaining wall, the wall would most likely be visible from KOP-3.

Viewer Response: This interchange experiences a considerable amount of pedestrian and motorist traffic, especially during the morning peak hours, from the residential tract to the north of Canwood Street. With approximately 270 residential units and approximately 2.7 residents per household, the number of viewers is approximately 1,500. Based on a City of Calabasas traffic study report, the existing traffic volume driving in and out on Canwood Street is approximately 260 vehicles during the morning peak time (7 a.m. to 9 a.m.) and 250 vehicles during the afternoon peak time (3 p.m. to 6 p.m.). The traffic study also predicts an increase to approximately 284 vehicles during the morning peak time and 294 vehicles during the afternoon peak time. Even though the residents have a minimal view of the interchange due to the lower geography, Canwood Street is the only street residents use to ingress to/egress from the community. Sensitivity to this change in the visual environments becomes Moderate High. Adverse change to the viewshed would be Moderate High.

Resulting Visual Impact: The resulting visual impact is Moderate and is considered as one of the most important due to the residential nature.

Existing



Proposed Mitigation



Figure 15: Key Observation Point (KOP) 3

Key Observation Point-4 (KOP-4) (See Figure 16.):

Orientation: This KOP is located on the south side of US-101 in The Summit, a new commercial center along the southbound side of US-101 and next to the southbound on-ramp. The existing view of this KOP is shown on Figure 12.

Existing Visual Quality/Character: This location is highly visible and is very vivid. Its character is determined by the views to the northeast, southwest, and southeast quadrants of the interchange. Lost Hills Road obstructs the view to the northwest quadrant.

Proposed Project Features: The existing Lost Hills Road overcrossing would be widened and built at a higher elevation. In the northeast quadrant, a cloverleaf would be added as a northbound on-ramp and a northbound off-ramp would also be added (just to the north of the cloverleaf). Both on/off-ramp would be located north of their existing locations.

Motorists traveling along the US-101 northbound and southbound on- and off-ramps would be subject to traffic light controls as they ingress onto and egress from Lost Hills Road. Motorists on Canwood Street as well as Lost Hills Road would be subject to traffic light controls at the T-intersection of Canwood Street with Lost Hills Road.

Change to Visual Quality/Character: The character of the KOP-4 would change moderately with the widening of Lost Hills Road. While Lost Hills Road obstructs the view to the northwest quadrant, the US-101 and the Project site are directly across from The Summit in the view to the northeast quadrant. Another consideration is that a retaining wall could potentially be located along the cloverleaf. In that case, depending on the height of the retaining wall, the wall may or not be visible from KOP-4.

Viewer Response: The Summit is estimated to generate an average of 5,391 cars daily. Sensitivity to this change is likely to be Moderate to High, depending on the actual amount of users accessing the center. The viewer response is expected to be Moderate to Moderate High.

Resulting Visual Impact: The change of visual quality would be Moderate to High. The overall visual impact would be Moderate to Moderate High.

E. Summary of Project Impacts

Short term impacts are of relatively short duration and long term impacts are those impacts that take longer to achieve full mitigation or are permanent to the project. Short term impacts would include the construction activity (i.e., construction equipment and materials, temporary roadside barriers, construction signage, and removal of existing mature plantings). Long term impacts for this project would include the amount of time it would take for the new plantings to achieve full growth. New plantings can reasonably be expected to reach mature growth within a one to three year period (depending on the species and initial planting size). Some tree species could take decades to reach mature growth.

Following is a brief summary by KOP of the visual impact levels.

KOP-1, located on Agoura Road along US-101, has an open view to the northeast and northwest quadrants of the Project site. However, due to the sloped nature of this KOP and the downhill situation of the Project site from the KOP, southbound motorists along Agoura Road will tend to focus on the downhill slope of the road instead of the landscape. Northbound motorists will not be looking in the direction of the Project site. The overall visual impact would be Low to Moderate.

KOP-2, located on the southbound side of the freeway, provides picturesque views from the northeast to the northwest. Sensitivity to the change in the Project site could vary from Low to Moderate based on the traveling speed of the motorists. The overall visual impact would be Low to Moderate.

KOP-3, located at the intersection of Lost Hills Road and Canwood Street, becomes an important observation point for local residents located in the northwest quadrant of the Project area. Since Canwood Street is the only ingress/egress from the community, the sensitivity and the resulting visual impact changes in the Project area would be Moderate.

KOP-4, located in The Summit, has an extended view of the Project site. It provides vivid views to the northeast, southwest, and southeast quadrants of the interchange. Sensitivity to the change varies from Moderate to High, depending on the number of users entering the center. The overall visual quality would be Moderate to Moderate High.

To determine the overall visual impact level of the Project, a point system was used. A Low visual impact is given one (1) point; Moderate is given two (2) points; Moderately High is given three (3) points, and a High visual impact level is given four (4) points. When the evaluation was between two levels, the points for the higher of the impact levels was used.

Existing



Proposed Mitigation



Figure 16: Key Observation Point (KOP) 4

For example, since KOP-1 was determined to be Low to Moderate, 2 points were given to this KOP. The sum of the various KOP levels adds up to 9 points. When divided by four for each of the KOP's, the average is 2.25 points. This average shows that the overall Project impact is slightly above-Moderate.

VISUAL IMPACT EVALUATION BY KOP		
	Visual Impact Level	Point Value
KOP-1	Low to Moderate	2
KOP-2	Low to Moderate	2
KOP-3	Moderate	2
KOP-4	Moderate to Moderate High	3
	Subtotal	9
	Average	2.25

Provided that appropriate landscaping and aesthetic treatments are included, the overall project impacts to the visual environment for the Lost Hills Road interchange project would increase the scenic quality available to the commercial buildings users, community residents, park users, and local and freeway travelers.

F. Cumulative Impacts

A cumulative impact, as defined by the Council on Environmental Quality (CEQ), is the impact on the environment that results from incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of which agency or person undertakes such actions. CEQA Guidelines define cumulative impacts as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor, but collectively major, actions taking place over a period of time.

The proposed widening of the Lost Hills Bridge and the US-101 northbound cloverleaf on-ramp and off-ramp would be a continuation of transportation improvements along Lost Hills Road and the US-101 in Calabasas to improve traffic flow to accommodate existing conditions and future needs. These improvements are anticipated to reduce the traffic queues while also improving motorist and pedestrian safety.

The wider and higher bridge structure and new on/off-ramps will increase the built environment of the proposed project area and reduce and replace the amount of natural landscape views/features with less visually desirable vertical hardscape/paving elements. The planned future construction of The Summit commercial center on the south side of the US-101, just east of Lost Hills Road will add to the built environment of the area.

VII. VISUAL MITIGATION

Both Caltrans and the FHWA mandate that a qualitative/aesthetic approach be taken to mitigate for visual quality loss in the project area. This Visual Impact Assessment adheres to the letter and the spirit of FHWA requirements as it addresses the actual cumulative loss of visual quality that would occur in the project viewshed when the project is implemented. It also presents mitigation measures that could more readily generate public acceptance of the project.

Visual mitigation for adverse project impacts addressed in the key view assessments and summarized in the previous section will consist of adhering to the following design requirements in cooperation with A Caltrans Landscape Architect. The requirements are arranged by project feature and include design options in order of effectiveness. All visual mitigation will be designed and implemented with the concurrence of the Caltrans District Landscape Architect.

A. Widening of the Existing Lost Hills Road Mitigation Measures

The proposed widening of the existing Lost Hills Road is to relieve the current traffic on Lost Hills Road as well as the traffic merging from/to the US-101 on and off-ramps. This interchange experiences a considerable amount of pedestrian and motor traffic largely from the residential community described in KOP-3 during peak morning and afternoon hours.

As the proposed widening of Lost Hills Road would replace an existing bridge with a wider and higher bridge structure, it would create a low visual impact change to the viewers (as opposed to a high visual change when a structure would be placed where none previously was). Therefore it is assumed that limited landscaping mitigation would be required to mitigate the proposed project.

Mitigation measures for the bridge abutment walls and the bridge structure itself can include a combination of color, texture, and embossing treatments as well as plantings (such as selected vines and groundcovers).

As the lack of sun exposure will most likely not be conducive to supporting healthy planting on the slopes underneath the bridge, slope paving with color, texture, and embossing treatments complementary to or the same as the bridge structure can mitigate the visual appearance of the area underneath the overcrossing.

The City supports the bridge widening alternative that includes a sidewalk on the west side of the street. The sidewalk should support the projected increase in pedestrian volume through the years.

The proposed widening of Lost Hills Road would create a low visual impact change to the viewers, therefore it is assumed that limited landscaping mitigation would be required. Sensitivity to preserving motorist and pedestrian sightlines will be critical for maintaining safety.

B. Cloverleaf Alternative Mitigation Measures

In the northeast quadrant, a cloverleaf would be added as a northbound on-ramp and a northbound off-ramp would also be added (just to the north of the cloverleaf). The existing Lost Hills Road overcrossing would be widened and built at a higher elevation. Both on/off-ramp would be located north of their existing location. Motorists traveling along the US-101 northbound and southbound on- and off-ramps would be subject to traffic light controls as they ingress onto and egress from Lost Hills Road. Motorists on Canwood Street as well as Lost Hills Road would be subject to traffic light controls at the T-intersection of Canwood Street with Lost Hills Road.

The proposed cloverleaf on-ramp and off-ramp would create the highest visual change in the Project area because the hillside would need to be cut into and possibly require a retaining wall to be installed.

Since the proposed on/off ramps would be situated at eye level and slope downward to below the grade of the freeway, motorists in any freeway lane other than the far right lane would most likely have their view of the ramps blocked by the freeway itself or other vehicles also traveling on the US-101. In addition, the northbound views of the proposed ramps would be mostly obstructed by the hillsides along the north side of the freeway. Any motorist viewing the ramps (while not actually using the ramps) would be subjected to the view for only a very brief duration passing at the posted traveling speeds as they come into the immediate area of the ramps.

With a moderate viewership of the mostly obstructed Project creating a moderate visual impact, it is anticipated that new landscaping could adequately mitigate the visual impacts of the proposed ramps.

Motorists using the proposed ramps and the viewers on Canwood Street and Lost Hills Road north of the US-101 will have the longest views of the on/off-ramps. This moderate amount of viewership could adequately have their views mitigated with the addition of landscape planting within the proposed ramps' cloverleaf loops. The variety of Coastal Live Oaks, Western Redbuds, Toyon and Mexican Sage could grow to provide the necessary screening within 5 years.

While the view of the actual on/off-ramps would be primarily limited to the northbound motorists in the far right lane on the US-101 (and the view would be only when the motorists are in the immediate area at the ramps), the motorists on the proposed ramps themselves, and the motorists on Canwood Street and Lost Hills Road (north of the US-101), the view of the cut hillside and possible retaining wall would be visible to all motorists traveling on the freeway as well as the north bound travelers on the Lost Hills Road overcrossing.

Depending on the height and length of the possible retaining wall, mitigation measures for the retaining wall could include a combination of color, texture, and embossing treatments as well as plantings (such as vines).

VIII. REFERENCES

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